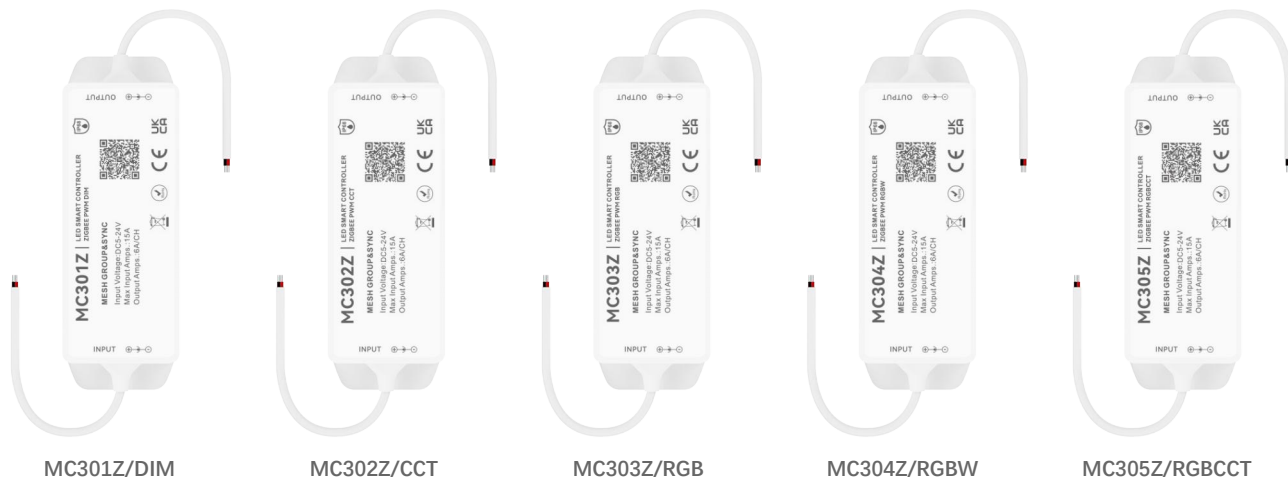


# MC30XZ | PWM 1-5CH ZIGBEE IP68 Waterproof LED intelligent grouping controller

## MC30XZ Series controllers+MESH Series remote control Specification



**Compatible remote controls** A single device can support 10 remote controls at the same time



### Compatible voice assistants

Support language command switch, brightness, color.



IP68 Waterproof MESH LED Controller is a Smart LED product with IP68 waterproof performance, which is used to control various lamps with led as light source, and its controller can support MESH signals. The connection adopts the advantages of waterproof interface, shell laser marking is not easy to fall, flexible and fast operation, convenient wiring, etc., which can be widely used in outdoor, decoration scene lighting and other places

### peculiarity

- MESH wireless transmission technology, stable signal and strong penetration.
- Support matching multiple devices, multiple devices can be controlled at the same time, and one remote control can manage and synchronize up to 500 controllers. Each controller can be supported by 10 remote controls.(Control distance 30 meters)
- The brightness of the remote control can be adjusted according to personal preference, and the brightness and speed of the dynamic mode can be edited.
- The controller can adjust the brightness, color, voice control, select various dynamic or custom scenario modes, timing, countdown and other functions through the Tuya/Smart Life APP.
- Device click to run and automate, automatic transfer and synchronization function.
- PWM (Pulse Width Modulation) technology is adopted to ensure smooth light transition and avoid eye fatigue.
- Voice control, support Asia Alexa, Google Assistant, Tmall Genie, Xiaomi Xiaoai voice assistant and other speakers.
- Support multi-controller cascade, easily cover large-area lighting scenes such as shopping malls, theaters, building facades, etc.
- With IP68 protection level, it can completely prevent dust from entering, and can work normally in a long-term immersion environment, can resist heavy rain, water splash, soaking, etc., and is suitable for outdoor humid environments, underwater environments and indoor high-humidity places

## Device parameters

### LED controllers

Input voltage	DC 5-24V
Input current	6/CH; 15A max
Access signal	MESH+ZIGBEE
Control the distance	30M
Size	L113XW39XH25mm
Authentication	CE,ROHS

### Environment

Operating temperature	Ta:-20°C~+60°C
Maximum temperature of the case	Tc:+65°C
IP rating	IP68

### Wrap

Package size	L13.5XW8.3XH5.5cm/0.1756kg
Box size (100 pcs)	L42XW29XH30cm/6kg

### LED remote control

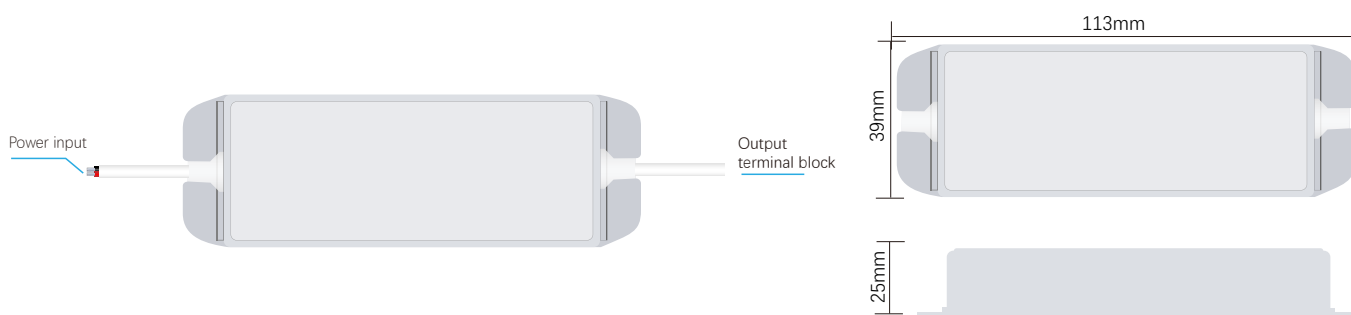
voltage	3V(AAA*2PCS)
Operating current	10mW
Transmission frequency	MESH (2.4GHz)
Transmit power	6dBm
Color temperature range	2700K-6500K
Dimming range	1-100% Infinitely dimming
Remote control distance	30M

Size	L122XW53XH21mm
Operating temperature	Ta:-20°C~+60°C
Authentication	CE,ROHS

### Wrap

Package size	L13XW5.8XH2.7cm/0.105kg
Box size (100 pcs)	L27XW30XH15cm/11kg

## Equipment mechanism and installation

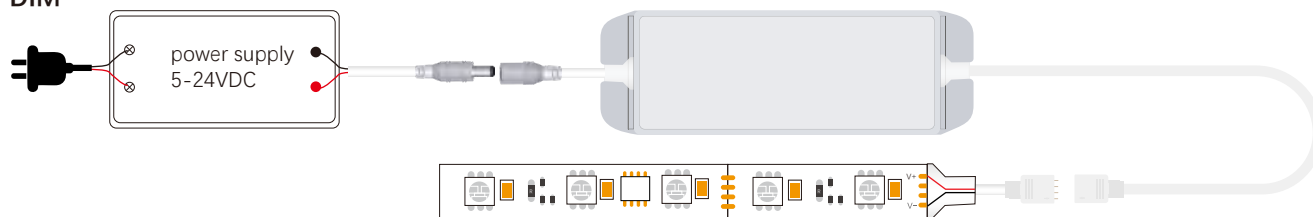


## Wiring diagram of the device

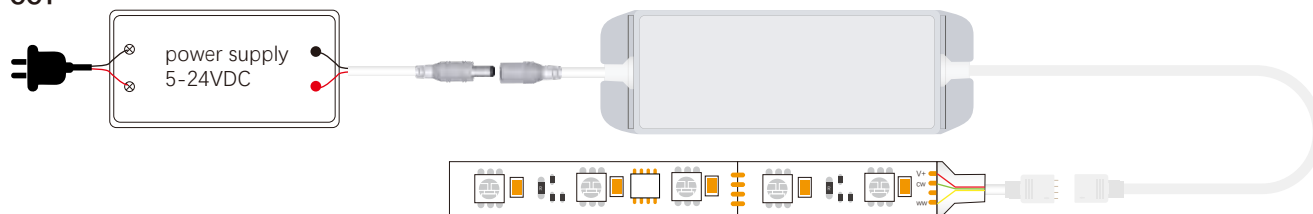
### Connect the strip light

AC100-240V

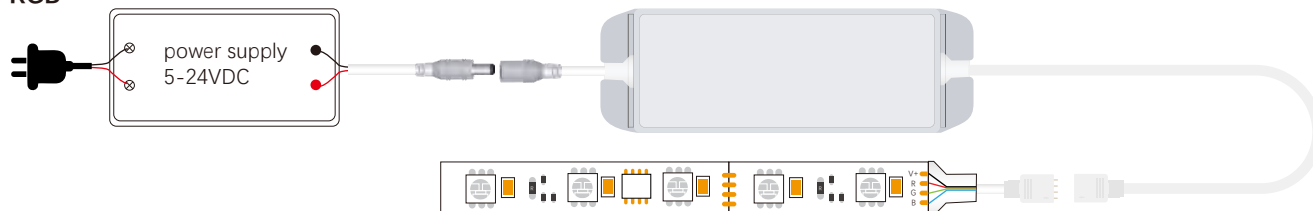
#### DIM



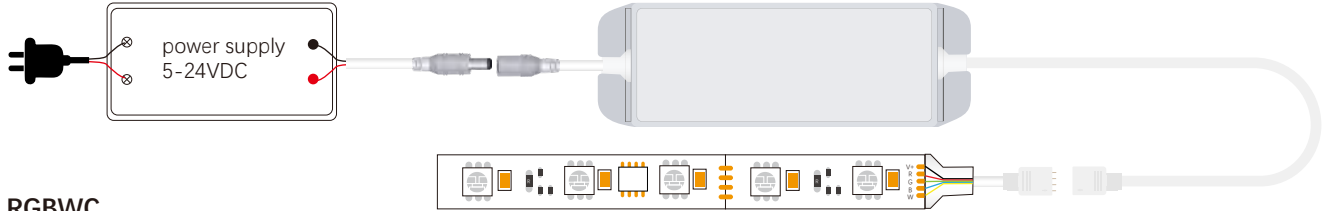
#### CCT



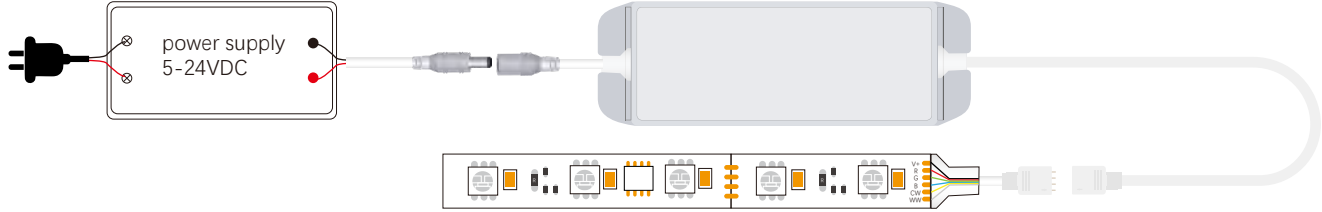
#### RGB



## RGBW

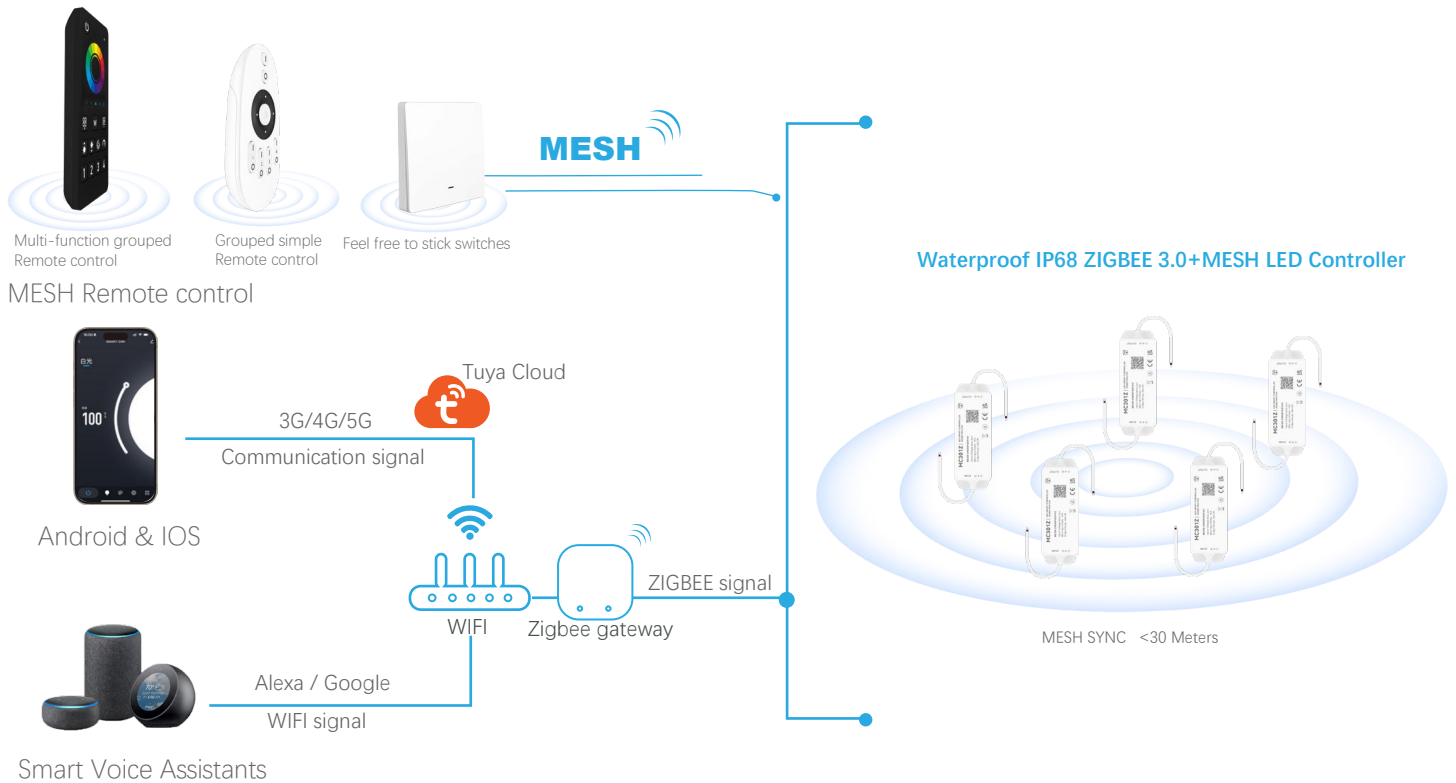


## RGBWC



## Schematic diagram of the control connection

### MESH wireless communication technology



## Tuya smart download & APP network connection

### 1. Download and install the [Smart Life] or [Tuya Smart] APP

Search for [Tuya Smart] on Apple or Google Play or scan the QR code below to download and install the app. Please click on the "Sign Up" button to create an account and use it for the first time, if you already have an account, log in directly.

Please download the corresponding Tuya/Smart Life APP according to your region.



Scan the QR code to download the APP







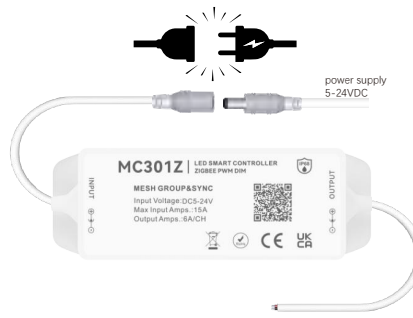
Smart Life APP



Tuya Smart APP

## 2. Product function description & reset the device

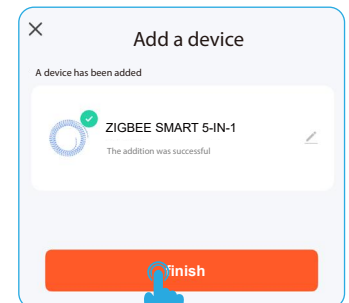
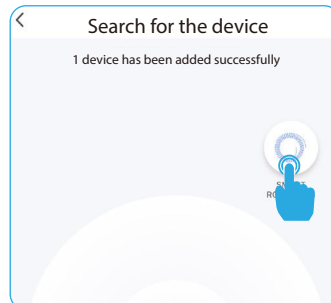
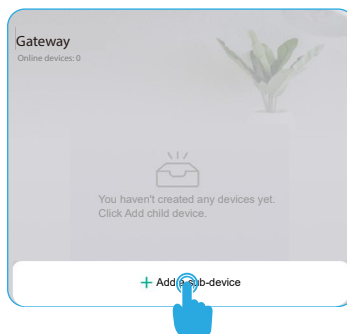
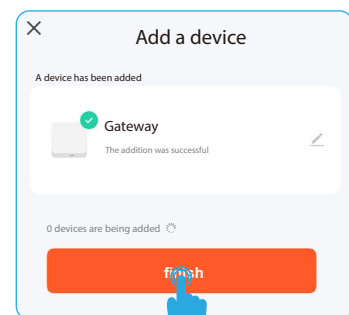
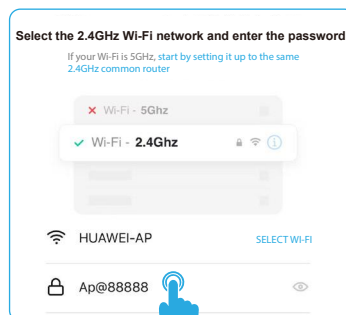
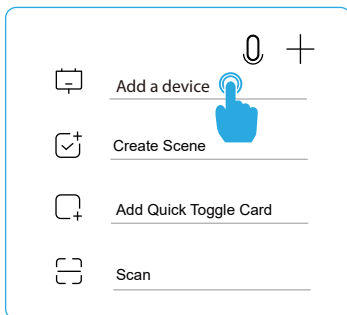
function		Power-off mode
 SET key	ON/OFF	NVA
 MESH Remote Control	The remote control is paired	3 Times
 Android & IOS	WiFi Connect	5 Times
 Clean up and reset	Clean up and reset	10 Times



## 3. Connect to your smartphone

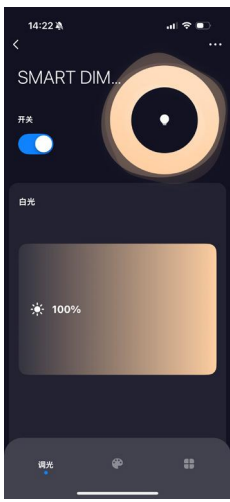
1. Make sure your smartphone is working under a WLAN network.
2. Open the Tuya APP, select Manually Add Gateway Central Control, select Zigbee Gateway, and enter the WIFI password to connect (Incorrect WIFI password will cause the connection to fail, non-2.4G network WIFI also.) will cause the connection to fail)
3. Reset the Zigbee gateway device, the red and blue lights of the Zigbee gateway are always on, turn on the power supply, please confirm that the red light is flashing, the blue light is always on, and the red light is always on after the connection is successful.
4. Click finish to enter the gateway control interface, add a sub-device, and confirm that the sub-device belongs to the distribution network mode (please place the gateway, controller, and smart phone close to each other for quick pairing identification) Power off and power on five times. After the connection is successful, the sub-device will be displayed on the homepage, then click on the device and enter the control interface for more operations.
5. After the controller is installed in the APP, we can easily control the LED lighting with the APP.

Follow these steps to complete the connection:



## Tuya APP interface

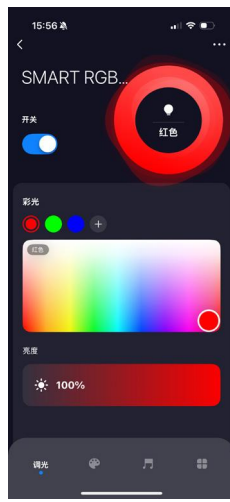
Main interface: white light mode; color temperature mode; IPL mode; Color light mode+ White light mode;  
Color light mode+ color temperature mode;



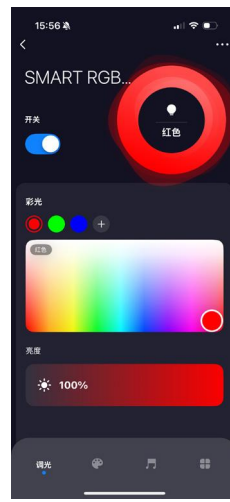
white light mode  
DIM



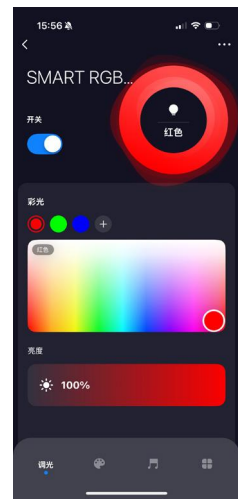
color temperature mode  
CCT



IPL mode  
RGB



Color light mode+  
White light mode  
RGBW

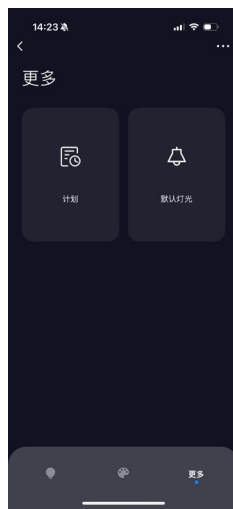


Color light mode+  
color temperature mode;  
RGB CCT

### MC301Z and MC302XZ Tuya app interface



Scenario mode



More pages



Settings page

**Scenario mode:** Four scenario modes to choose from.

**More page:** Schedule: Customize the countdown time to perform the on/off light action, and the light will automatically turn off when the countdown ends.

Default Light: Select the default light state to be turned on from the power supply each time; DIY lighting available.

**Settings page:** This interface can be bound with third-party language control, one-click execution and automation, group creation, device sharing and other functions.

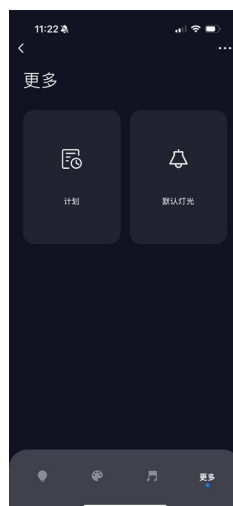
### MC303XZ、MC304XZ、MC305XZ Tuya app interface



Scenario mode



Music mode



More pages



Settings page

**Scenario mode:** Eight scenario modes to choose from

**Music mode:** Local music: The device microphone collects music, and the lights move with it. There are five preset rhythms with adjustable sensitivity. Three custom modes to edit the rhythm, and two types of movements can be edited Effects, jumps and classics, edit color and sensitivity.

APP music: The mobile phone collects the microphone, and the lights rhythm with it. There are five preset grooves. Three custom modes to edit grooves, you can edit two animations, jumping and breathing, Edit color, sensitivity, decibel and pitch rhythm modes, adjustable min/max decibel-0-100db

**More page:** Schedule: Customize the countdown time to perform the on/off light action, and the light will automatically turn off when the countdown ends.

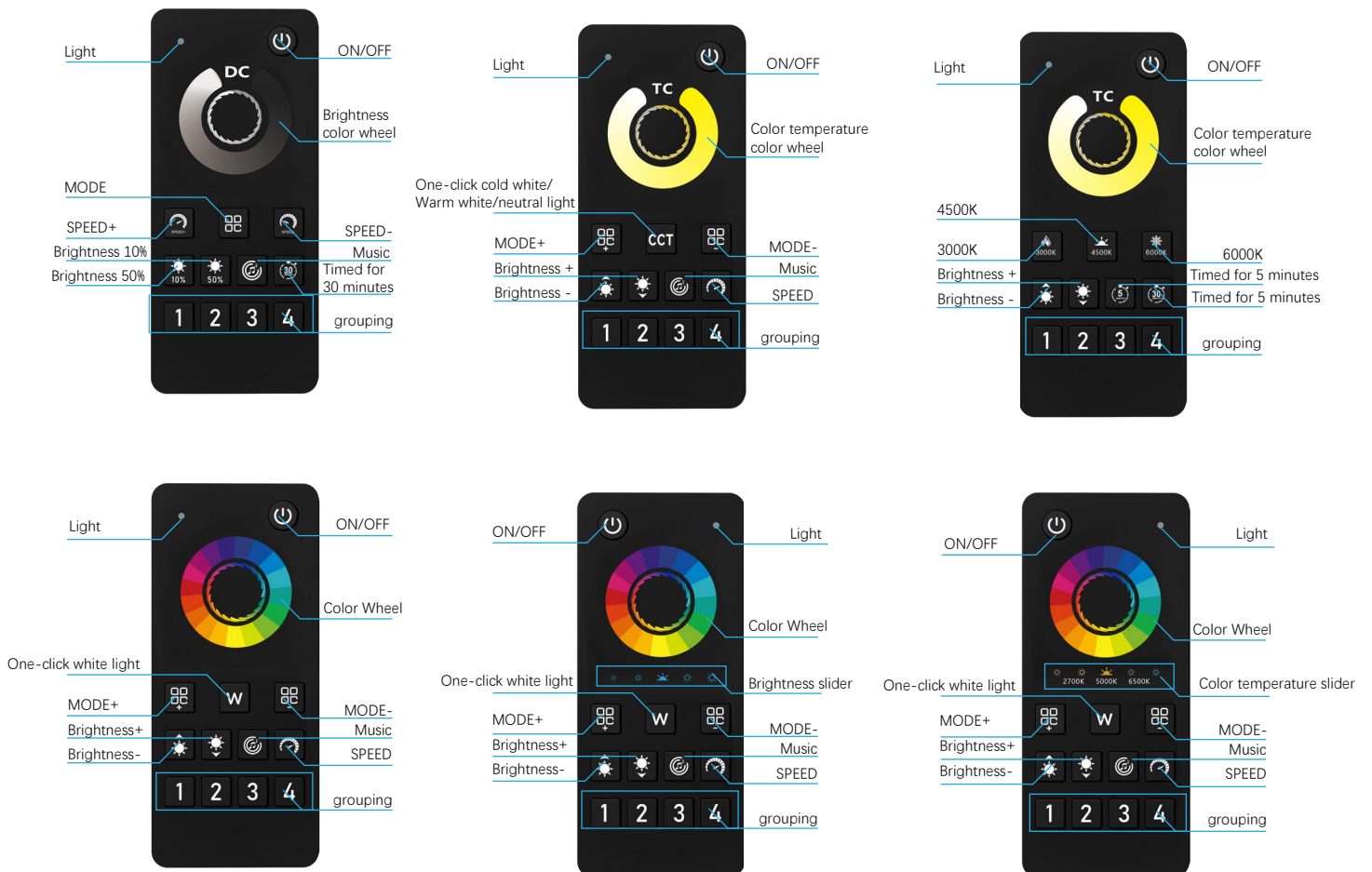
Default Light: Select the default light state to be turned on from the power supply each time; DIY lighting available.

**Settings page:** This interface can be bound with third-party language control, one-click execution and automation, group creation, device sharing and other functions.

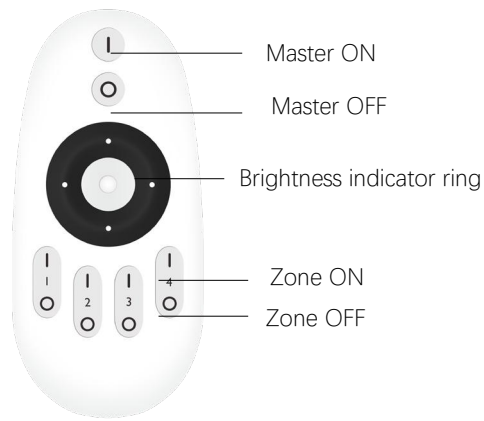
## Description of the function of the remote control

Multi-function grouped Remote control

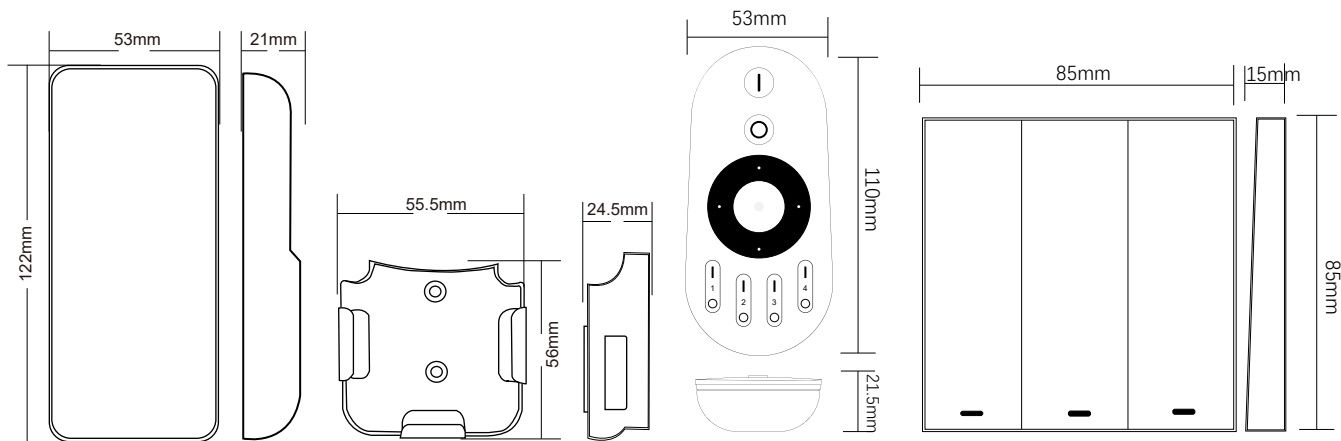
 Main ON/OFF button    **1 2 3 4** Grouping key    Short press; Select the key function. Long press; Perform key functions.



Grouped simple Remote control



Feel free to stick switches



## Safety Precautions

1. The remote control is a precision electronic product, please do not use it in a humid or high temperature environment for a long time. If not in use for a long time, remove the battery and store it in a cool, dry place.
2. Do not use this device in a large area of metal or in an environment with strong electromagnetic waves nearby, otherwise it will seriously affect the control distance
3. Please check whether the input voltage of the constant voltage power supply meets the requirements of the controller, and check whether the connection of the cathode and anode is correct.
4. The working voltage is DC 5~24V, if the voltage is higher than 24V, the controller will be damaged.
5. Non-professional users cannot directly disassemble the controller, otherwise it may cause fire and electric shock.
6. The working temperature ( $T_a$ ) is  $-20\sim 60^{\circ}\text{C}$ ; Do not use the device in direct sunlight, humidity, or other high-temperature areas.
7. When the equipment load reaches 15A, the wire diameter must be more than 1.5 square millimeters
8. When the device load exceeds 10A, the connection cable from the DC port to the LED strip must be shorter than 40cm.
9. Please install the device in a good heat dissipation area.